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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/765,917	01/18/2001	Laurence H. Cooke	260/086	8269

23639 7590 11/23/2005  
BINGHAM, MCCUTCHEN LLP  
THREE EMBARCADERO CENTER  
18 FLOOR  
SAN FRANCISCO, CA 94111-4067

EXAMINER

DIMYAN, MAGID Y

ART UNIT PAPER NUMBER

2825

DATE MAILED: 11/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/765,917

Applicant(s)

COOKE ET AL

Examiner

Magid Y. Dimyan

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 27 October 2005.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-8 and 24-33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 24-33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/27/2005 has been entered. Amended claims 1 – 8 and new claims 24 – 33 remain pending in this application.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. **Claims 1 – 8 and 24 – 33 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,477,691 to Bergamashi/Rab et al. (hereinafter, "Bergamashi").**

4. Regarding claims 1 and 5, Bergamashi teaches a interface for communicating between electronic components (claim 1), and an electronic component (claim 5),

having multiple connection points (see Abstract; col. 4, lines 30 – 40; Fig. 2) comprising: (a) a circuit for a state machine (e.g. DMA controller) to perform as a target (i.e., slave) and an initiator (i.e., master) of a communication (see Fig. 3; col. 5, lines 20 – col. 6, line 24); and (b) a plurality of pins connected to the circuit corresponding to a set of target signals handling communications involving the component as a target and a set of initiator signals handling communications involving the component as an initiator (see also Figs. 1, 3, 7; col.8, line 35 – col. 9, line 54), wherein the initiator signal is consistent with a virtual component interface protocol (see Figs. 2, 3, 8; col. 9, line 55 – col. 10, line 24). Bergamashi thus clearly recites all the claimed limitations.

5. Referring to claims 2 – 4, see Fig. 7 (v1/(r1, r2), v2 (r3/r4), v3 (r5/r6), etc), which show all the claimed interface elements of (a) unidirectional pins with at least one input pin and one output pin; (b) number of input pins equal to number of output pins; and (c) the set of target signals is symmetric with the set of initiator signals.

6. Claims 6 – 8 contain the same limitations as in claims 2 – 4, respectively, and thus the same rejections also apply.

7. Pursuant to claims 24 – 28, see above, as well as Fig. 5; col. 7, line 24 – col. 8, line 61 which disclose all the claimed limitations pertaining to the state machine performing as the target and the initiator.

8. Claims 29 – 33 contain the same limitations as claims 24 – 28, respectively, and therefore the same rejections also apply.

### ***Response to Remarks***

9. Applicant's remarks filed 10 October 2005 with respect to the rejections of claims 1 - 8 under 35 USC 102(e) have been fully considered and are **not persuasive**.

Applicants primarily argue on page 7 of their Remarks that independent claims 1 and 5 require "***a state machine to perform as a target and an initiator of a communication***", but Applicants "***cannot find any disclosure in Bergamot indicating that a state machine can be used to perform as a target and an initiator of communication***". The Examiner respectfully **disagrees** with that assertion.

Bergamashi (see Figure 3 and column 5, line 49 – col. 6, line 14) cites that the virtual elements of his design also include a DMA Controller and other processors for transferring data over the PLB bus. It is well known in the art that a **DMA controller is inherently a state machine**. Furthermore, as stated by Bergamashi, each virtual port used with the virtual elements (several external interfaces which communicate with the environment) can be expanded into several real ports of different directions (i.e., IN, OUT; INOUT) so that a ***state machine (controller) can perform as a target*** (slave, sink) or an **initiator** (master, source) as claimed.

Thus, it is clear to the Examiner that Bergamashi anticipates independent claims 1 and 5, and all their dependent claims, and thus the FINAL rejection is maintained.

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Magid Y. Dimyan whose telephone number is (571) 272-1889. The examiner can normally be reached on Monday - Friday 8:00 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew S. Smith can be reached on (571) 272-1907. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.


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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Magid Y Dimyan  
Examiner  
Art Unit 2825

myd  
18 November 2005



  
THUAN DO  
Primary examiner.  
11/21/2005.